REMARKS

Status of the Claims

With this amendment, claims 1-26 are pending in the present application. Applicants acknowledge with appreciation the Examiner's indication that claims 1-8 contain allowable subject matter.

For convenience, the Examiner's rejections are addressed in the order in which they were presented in the August 2, 2002 Office Action. Reconsideration is respectfully requested.

Rejection of claims 9-19 under 35 U.S.C. § 103

Claims 9-19 remain rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Gait, *Oligonucleotide Synthesis: A practical approach*, October 1984, in combination with Montgomery *et al.*, *J. Medicinal Chem.*, 29, 2389-2392 (1986), Perlman *et al.*, J. Med. Chem., 28, 741-748 (1985), and Greene *et al., Protective Groups in Organic Chemistry*, pp. 413-416 (1991). As best understood, the Office Action asserts that, depending upon the involved claim, either the Perlman or the Montgomery reference teaches the general purine or pyrimidine formula of the claimed compound, and the Gait or Greene references (sometimes both are necessary) teach the particular protecting groups thereon. In response, Applicants respectfully traverse the rejection.

As is stated in M.P.E.P. § 2143, three criteria must be met to establish prima facie obviousness:

> First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Here, a *prima facie* case of obviousness has not been established, at least because there is no evidence of a suggestion or motivation to modify the cited references.

There is simply no motivation or suggestion provided in the cited references to use a protecting group appearing, for example, in the Gait or Greene references in connection with the compounds recited in claims 9-19. In both the Perlman and Montgomery references, for example, the disclosed compounds are not protected. Furthermore, the Office Action points to nothing in the references suggesting that the claimed compounds would benefit from the use of protecting groups. Similarly, the Office Action fails to identify any discussion in the Greene or Gait references suggesting that the particular compounds disclosed in the Perlman or Montgomery references would benefit from the addition of protecting groups. As taught in the Gait reference, oligonucleotide synthesis requires a careful consideration of the structure of the oligonucleotide to be synthesized. Accordingly, even though the Gait reference may generally suggest the use of protecting groups for the protection of exocyclic amino groups, it ***does not*** suggest the use of protecting groups for the particular compounds of the present invention. Accordingly, Applicants maintain that the Gait disclosure does not render the synthesis of the presently claimed compounds obvious and therefore, that the skilled practitioner would not have been motivated to use the protecting groups disclosed in the Gait reference or Greene reference

with the compounds disclosed in the Perlman or Montgomery references. The law requires that motivation come from a fair reading of all the references, rather than from combining only selected language from the prior art with the Applicant's disclosure.

Accordingly, Applicants respectfully request that the rejection of claims 9-19 under 35 U.S.C. § 103 be withdrawn.

Rejection of Claims 20-26 under 35 U.S.C. § 103

Claims 20-26 remain rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over the Gait reference in combination with Sterzycki *et al.,* European Patent Application No. EP 0316017. In this regard, the Office Action maintains the assertion that it would have been obvious to prepare oligonucleotides from the 2'-deoxy-2'-fluoro-arabinonucleosides disclosed by the Sterzycki reference, according to the methods taught in the Gait reference. Applicants note, however, that modifying the teachings of the Gait and Sterzycki references in the manner that the Examiner proposes still would not have produced any compound of the type recited in claim 22.

Moreover, the Examiner still has not identified any reason why those skilled in the art would have been motivated to make this modification as opposed to the many others that theoretically would have been possible. *In re Geiger*, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987) (the mere fact that a person of ordinary skill would have found it obvious to try combinations of known reagents held not to satisfy the standard of § 103.)

Although the Examiner notes that general methods for preparing oligonucleotides are well known in the art, this fact falls far short of providing motivation for making an oligonucleotide from the nucleosides disclosed in the Sterzycki reference – particularly when the

Sterzycki reference teaches that its disclosed nucleosides find utility when they exist as monomers, and are ***not*** incorporated into an oligomer (*see, e.g.*, abstract on cover page).

The Examiner appears to mistakenly suggest that those of ordinary skill would have been motivated by Applicants' discussion relating to the Ikehara reference on page 4 of their disclosure. This discussion, however, would not have been available to those of ordinary skill because (as indicated in the first line of the paragraph on page 4 in which the Ikehara reference is mentioned) it is one recognition associated with Applicants' "present invention."

Since the elements necessary to establish a *prima facie* case of obviousness have not been established, Applicants respectfully request that the rejection of claims 20-26 under 35 U.S.C. § 103 be withdrawn.

Applicants respectfully submit that the foregoing constitutes a *bona fide* attempt to advance prosecution. If a telephonic interview would facilitate advancing prosecution, the undersigned invites the Examiner to call her at the number below.

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